

## E-3. HEALTH AND SAFETY TRAINING

### I. SCOPE

This chapter summarizes environmental compliance and health and safety training programs provided by the Environment, Health and Safety Program (EHS). Additional information regarding any of these programs can be found in appropriate chapters of this manual.

### II. PURPOSE

To ensure that all workers at the NCI-Frederick receive required and appropriate environmental compliance and health and safety training as mandated by regulations, and that supplementary training will be identified and performed, which will materially benefit employees.

### III. DEFINITIONS

**Required** - For the purposes of this chapter, "required" refers to all training which is mandated by local, state or federal environmental and safety regulations or by NCI-Frederick policy.

### IV. RESPONSIBILITIES

#### A. EHS

1. Provide or coordinate training programs as indicated in the training matrices found in Section VII of this chapter.
2. Identify requirements for additional training programs or modification of existing programs.
3. Document all training delivered by EHS staff.
4. Be knowledgeable of local, state, and federal regulations.

#### B. FME

Provides NCI-Frederick-specific safety information to representatives of each construction/renovation contractor prior to initiation of activities at NCI-Frederick.

C. Supervisors

1. Ensure personnel receive applicable skill-specific training as identified in Section VII of this chapter.
2. Provide area-specific training to all employees new to the area.
3. Ensure that personnel attend required safety training sessions.
4. Request additional training from EHS as necessary.
5. Ensure personnel are provided with additional or refresher training when requirements are identified by EHS or employees.
6. Document area-specific training delivered. Forward documentation to employee's personnel office for inclusion into employee personnel record.

D. Employees

1. Attend required safety training sessions.
2. Request additional training from supervisor or EHS as appropriate.

E. Subcontractors

Relay safety training information to their employees and to their subcontractors.

V. **PROCEDURES**

- A. Specific training programs mandated by the federal, state or local regulations cited in Section VIII are described in other chapters of this manual. These programs are summarized in Table E-3-1, "NCI-Frederick Required Training Matrix".
- B. Specific supplemental training programs are described in other chapters of this manual. These programs are summarized in Table E-3-2, "NCI-Frederick Supplemental Training Matrix".
- C. Courses which are considered required training for specific target groups are available as supplemental training for all other employees.

## VI. **DOCUMENTATION**

All required and supplemental environmental compliance and health and safety training will be documented as described in other chapters of this manual. The minimum requirements for documentation of training include:

- Date and time of training
- Training topics
- Attendee signature
- Trainer(s)
- Copy of material covered, detailed summary or outline, specific reference to course title, and location of training materials
- Training Course Evaluations

## VII. **TRAINING MATRICES**

- A. NCI-Frederick Required Training Matrix (see Table E-3-1)
- B. NCI-Frederick Supplemental Training Matrix (see Table E-3-2)

**Table E-3-1 Required Training Matrix**

<b>Training Topic</b>	<b>Training Provider</b>	<b>Required</b>	<b>Duration</b>	<b>Audience</b>
New Employee Orient.	EHS Staff	One-time	6 hours	New employees
Student Intern	EHS Staff	Annually	8 hours	Summer student interns
Bloodborne Pathogens a) initial b) refresher c) additional initial	EHS Staff EHS Staff Principal Inv. (PI)	One-time Annually One-time	1 hour 1 hour/CBT As needed	New BBP program members All BBP program members New members w/o experience
Hazard Communications a) initial b) additional initial c) additional	EHS Staff Supervisor, Foreman, or Program Manager Supervisor, Foreman, or Program Manager	One-time One-time As Needed	1 hour As Needed As Needed	New non-laboratory employees New non-lab employees w/o experience with chemicals and procedures Non-lab employees exposed to new chemical hazards
Lab Standard a) initial b) additional initial c) additional	EHS Staff Supervisor, PI, or Program Manager Supervisor, PI, or Program Manager	One-time One-time As Needed	1 hour As Needed As Needed	New lab employees New lab employees w/o experience with chemicals and procedures Lab employees exposed to new chemical hazards
Substance-specific Standards a) initial b) refresher	EHS Staff EHS staff	One-time per substance Annual	As Needed As Needed	Empl. who may be exposed at or above action level, exclusion limit, STEL, or PEL Empl. who may be exposed at or above action level, excursion limit, STEL, or PEL
Lab Specific Safety Trng.	Supervisor	One-time	As Needed	Laboratory personnel
Radiation Safety Training for New Users	CBT	One-time	self-paced	New isotope users
Radiation Refresher Training	EHS Staff/Computer Based Training (CBT)	Every two years	1 hour	Ancillary personnel
Protocol Spec. Rad Safety	Principal Inv. (PI)	One-time per protocol	As Needed	Isotope users
Respiratory Protection a) initial b) refresher	EHS Staff EHS Staff	One-time Annually	2 hours 1 hour	Employees utilizing respiratory personal protective equipment and their supervisors
Hearing Conservation a) initial b) refresher c) additional	EHS Staff EHS Staff EHS Staff	One-time Annual As Needed	2 hours 1 hour As Needed	Employees exposed to noise at or above an 8 hour TWA of 85 dbA Employees with changed procedures
CPR Training	EHS/OHS Staff	Bi-annually	4-6 hours	EHS/OHS Staff, Security personnel
First Aid Training	OHS Staff	Bi-annually	4-6 hours	Security personnel, electricians, Area Safety Representatives, other off-site employees designated by supervisor
Lockout/Tagout a) initial b) refresher	EHS Staff EHS Staff	One-time As Needed	2 hours As Needed	Maintenance staff Empl. with changed procedures
Confined Space a) initial b) refresher	EHS Staff EHS Staff	As Needed As Needed	4 hours As Needed	Selected maintenance staff Empl. with changed procedures
Forklift a) initial b) refresher	EHS Staff EHS Staff	One-time Every 3 years	4 hours 4 hours	Forklift operators Forklift operators

**Table E-3-1 Required Training Matrix**

<b>Training Topic</b>	<b>Training Provider</b>	<b>Required</b>	<b>Duration</b>	<b>Audience</b>
DOT Hazmat				
a) handlers				
1) initial	EHS Staff	One-time	2 hours	Warehouse and other workers who handle packaged hazardous materials
2) additional	EHS Staff	As-Needed	2 hours	Empl. with changed procedures
3) refresher	EHS Staff	One-time	2 hours	Warehouse and other works who handle packaged hazardous materials
b) shippers				Employees who package hazardous material for shipment
1) initial	EHS Staff	One-time	2 days	Employees who package hazardous material for shipment
2) refresher	EHS Staff	Bi-Annual	2 days	
Lab Equipment Decon	EHS Staff	As Needed	3 hours	Employees who will sign Work Authorization Tags for EHS
Medical Waste	EHS Staff	Annually	1 hour	All custodial staff
Satellite Accumulation				
a. annual refresher	EHS Staff/ or CBT*	Annually	1 hour/or CBT	All hazardous waste generators

\*CBT: Computer Based Training

**Table E-3-2 Supplemental Training Matrix**

Training Topic	Training Provider	Required	Duration	Audience
Lockout/Tagout a) initial b) refresher c) additional	EHS Staff EHS Staff EHS Staff	One-time Annually As Needed	2 hours 2 hours As Needed	Maintenance Staff Maintenance Staff Employees with changed procedures
Confined Space a) initial b) refresher c) additional	EHS Staff EHS Staff EHS Staff	As Needed Annually As Needed	4 hours 2 hours As Needed	Selected maintenance staff Selected maintenance staff Employees with changed procedures
Fire Extinguisher a) initial	EHS/USAG Fire Dept.	One-time	2 hours	All employees
DOT Hazmat a) handlers 1) initial 2) additional 3) refresher b) shippers 1) initial 2) refresher	EHS Staff  EHS staff EHS Staff  EHS Staff EHS Staff	One-time  As-Needed One-time  One-time Bi-annual	2 hours  2 hours 2 hours  2 days 2 days	Warehouse and other workers who handle packaged hazardous materials. Employees with changed procedures. Warehouse and other workers who handle packaged hazardous materials.  Employees who package hazardous material for shipment. Employees who package hazardous material for shipment.
Use of Biological Safety Cabinet	EHS Staff	Annual/As Needed	1 hour	Laboratory personnel
Use of Autoclaves	EHS Staff	Annual/As Needed	1 hour	Laboratory personnel
Lab Equipment Decon	EHS Staff	As Needed	3 hours	Employees who will sign Work Authorization Tags for EHS
HIV Training (non-occupational)	American Red Cross	One-time	3 hours	All contractor employees
Back Injury Prevention Class	Physical or Occupational Therapist	As Needed	4 hours	Employees identified to have lifting requirements in their normal duties or history of back pain.
Ergonomic Training	EHS/OHS Staff or contractor	As Needed	3 hours	Employees at high-risk for cumulative trauma disorders
High Risk Travel	Manager, Protective Services	As Needed	½ hour	Employees traveling to high risk areas (P&P 202)
Shipment Requesting	EHS Staff	As needed	1 ½ hours	Employees who fill out shipment request forms
Driver a) initial b) refresher	EHS Staff  EHS Staff	As Needed  As Needed	4 hours  4 hours	Employees required to operate motor vehicles. Employees involved in accidents with DHHS vehicle.
Fire Extinguisher a) initial b) refresher	EHS/USAG F.D. EHS/USAG F.D.	As Needed As Needed	2 hours 1 hour	All employees All employees
Medical Waste	EHS Staff	As Needed	1 hour	All laboratory and custodial staff
Occupational Zoonotic Diseases	EHS Staff	As Needed	2 hours	Selected LASP personnel

## VIII. REGULATORY REFERENCES

### A. Biological Safety

1. 29 CFR Part 1910.1030 - Bloodborne pathogen; initial training, refresher training and additional initial training.

### B. Chemical Safety

1. 29 CFR 1910.1200 - Hazard communication; initial training, additional initial training, additional training when a new hazard is introduced into the work area.
2. 29 CFR 1910.1450 - Occupational exposure to hazardous chemicals in laboratories; initial training, additional initial training, additional training prior to assignments involving new exposure situations and refresher training.
3. 29 CFR 1910 Subpart Z - Toxic and hazardous substances; initial training and refresher training.
4. 29 CFR 1910.132 Personal protective equipment; initial training, retraining when the work place or PPE changes and retraining when the employee's knowledge is deemed inadequate.
5. 40 CFR 262 - Standards applicable to generators of hazardous waste; initial training before new assignments and refresher training.
6. 29 CFR 1910.120 - Hazardous waste operations and emergency response; initial training, refresher training and trainer training.

### C. Industrial Safety

1. 29 CFR 1910.95 - Hearing conservation; annual training.
2. 29 CFR 1910.134 - Respiratory protection; initial training for workers and supervisors; annual refresher training.
3. 29 CFR 1910.146 - Confined space; initial training, refresher training, additional training and retraining.
4. 29 CFR 1910.147 - Lockout/Tagout; initial training, refresher training, additional training and retraining.

5. 29 CFR 1910.157 - Fire extinguisher; initial training and refresher training.
6. 29 CFR 1910.178 – Forklift Operator Training; initial training, refresher training, and retraining.

D. Radiation Safety

1. 10 CFR 19.10 - Instructions to workers; health physics training, operational training and basic radiation safety concepts training.
2. 10 CFR 33.13 - Requirements for the issuance of a Type A specific license of broad scope; health physics training and operational radiation training.
3. NRC License, NCI-Frederick Radiation Safety Manual Part IID - training; protocol specific training.

E. OHS

1. 29 CFR 1910.151 - Medical services and first aid; first aid training and CPR training.
2. 29 CFR 1910.269 - First aid and CPR training; first aid training including CPR.

F. Other

1. 49 CFR Part 172. Subpart H. 172.704 - Hazardous material shipping; shipper and handler training.